SUBJECT **SUBSTITUTION OF SPOTMATIC CAMERA AMMETER**

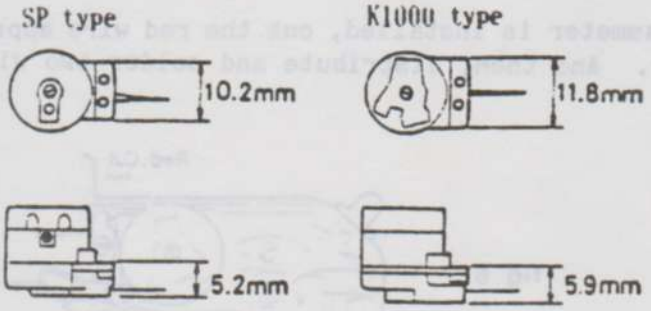
CONTENT

The SP series Ammeter is now no longer available, we recommend the use of the K1000 ammeter for the substitution.

But SP and K1000 type ammeters are physically different as shown in Fig. 1.

For that reason, you will have to modify and adjust.

fig.1



MODIFICATION

1. Cut both ends of the plastic body as indicated in Fig. 2 by cutter-knife to make the width (10.9mm) --- refer to Fig. 3.
   Be careful not to allow plastic pieces to fall into ammeter mechanism.
2. Remove the bottom cover. It is quite difficult to install K1000 meter with bottom cover in place.
3. Put an insulation tape to the position, as shown in Fig. 2, to prevent the ammeter from shorting out with the body ground.

fig.2

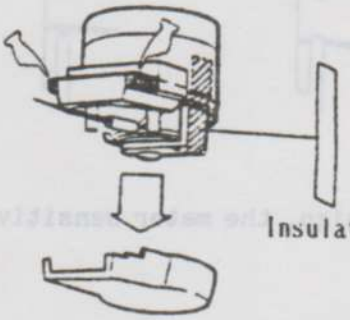
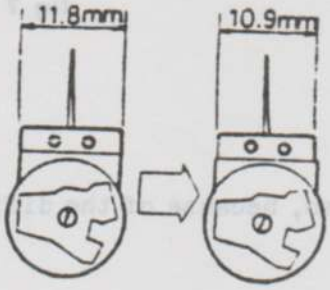


fig.3



INSTALLATION/POSITION ADJUSTMENT

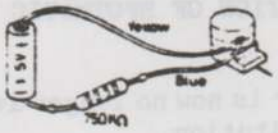
To avoid the camera user from becoming confused, the meter "off" position will have to be adjusted. The K1000 meter is designed for center position whereby the SP system is designed for off-center position (-) side.

In order to get the off position toward (-) minus side, 2uA of current must be applied to the ammeter.

To apply 2uA current:
1. In case you have a 3uA tester, connect 300 K ohm resistor between the tester and the ammeter as shown in Fig. 4.
2. In case you do not have a 3uA tester, connect 750 K ohm resistor between the 1.5v battery and the ammeter. Make sure the voltage of battery is 1.5v.

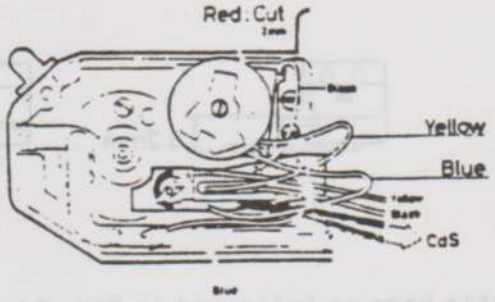
fig.4

fig.5



WIRING
After the ammeter is installed, cut the red wire approximately 2mm away from the meter body. And then, distribute and solder two wires as shown in Fig.6.

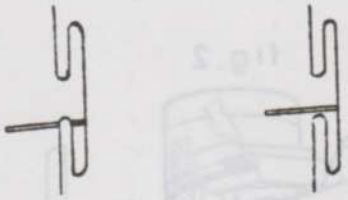
fig.6



NOTE
1. Because the K1000 ammeter is of a different design, the off position may be slightly different (not extending down enough) from the original SP type meter.

Original SP Meter Modified K1000 Meter

fig.7



2. Also, because of the different design, the meter sensitivity will be slightly lower.

OTHER
When you start to modify or you finish the modification, please explain to the customer the following two things.
1. The off position will be different.
2. The meter sensitivity will be slightly lower.